

THE PREDICTIVE UTILITY OF ECOLOGICAL MOMENTARY
ASSESSMENT MEASURES VERSUS RETROSPECTIVE SELF-
REPORT MEASURES: A QUALITATIVE LITERATURE REVIEW

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Proponents of ecological momentary assessment (EMA), in which repeated measures of variables are obtained in real-time from individuals in their environment, have asserted that the reliability and validity of self-reports obtained by this method are superior to those obtained by traditional retrospective assessments. Because this claim has not been adequately evaluated, we conducted a qualitative literature review to address the following question related to this assertion: Is the predictive utility of EMA self-reports superior to that of retrospective self-reports? We searched MedLine and PsycInfo for studies that obtained both EMA measures and retrospective measures of the same construct and examined the ability of EMA and retrospective measures to predict the same outcome. Eight studies were identified. One study examined two separate outcomes and therefore results are presented based on 9 findings. The studies revealed that EMA measures were stronger predictors of the outcome than retrospective measures in 5 (56%) findings. In 2 (22%) findings, retrospective measures outperformed EMA measures. Results of 2 findings were equivocal. In sum, the bulk of the evidence provides preliminary support for the notion that EMA measures have superior predictive utility as compared to retrospective measures; however, the type of outcome (biological vs. behavioral/subjective) may influence the pattern of results. There is a clear need for research to determine in which situations EMA or retrospective measures are stronger predictors of outcomes.